RHIC p-Carbon Polarimeter

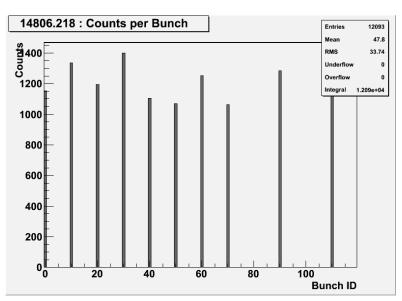
Status Report

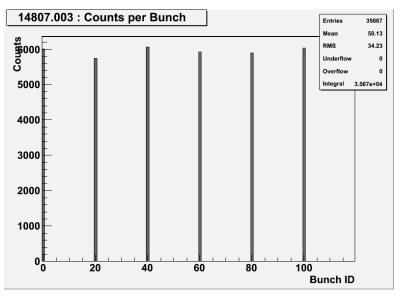
Dmitri Smirnov RHIC Spin Group, BNL

January 13, 2011

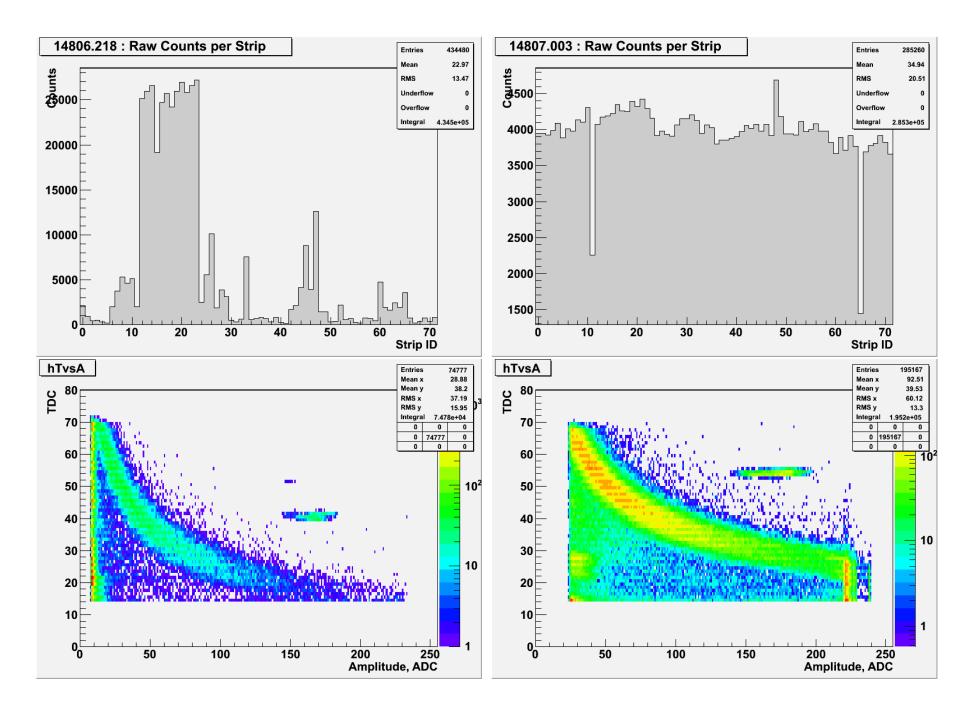
First Run11 Data from Blue-2 and Blue-1

- Blue-2, Run 14806.218, Horizontal target 1
- Blue-1, Run 14807.003, Vertical target 1
- Running conditions:
 - ullet Dead layer and t_0 values are guessed and same for all channels
 - The distance to detectors (TOFLength) is not set correctly (also used in offline)
 - Blue-2: Lower carbon energy threshold $E_{\rm trig}=200~{\rm keV}$
 - ullet Blue-1: Adjusted carbon energy threshold $E_{\mathsf{trig}} = 270 \; \mathsf{keV}$



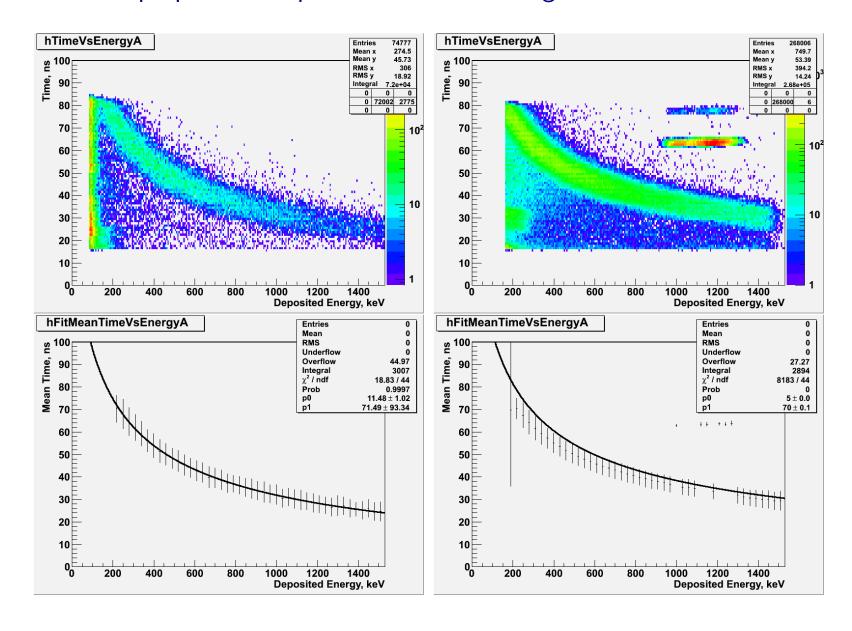


Blue-2 and Blue-1



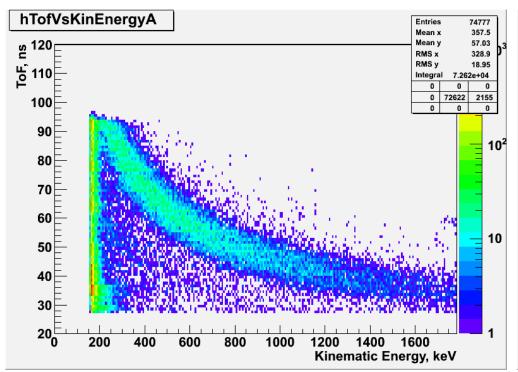
Blue-2 and Blue-1

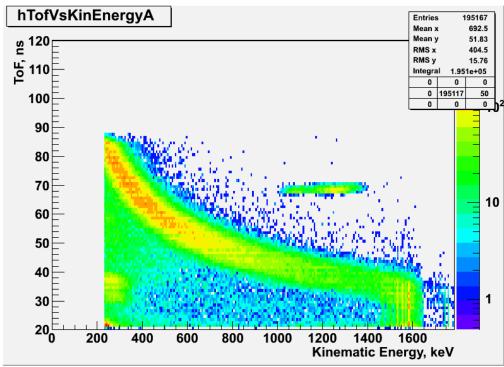
Offline fit needs proper online parameters— TOFLength



Blue-2 and Blue-1

• Upstream and downstream have different dynamic ranges





Conclusions

- We see the bananas!
- No data from channels 12 and 66 in Blue-1
- Offline fit fails with incorrect TOF length (expected)
- ullet Need to fit the available data and feed t_0 and the dead layer back to online
- Take more runs. . .
- Finer tuning in time and energy might be possible